

COPOLYMERS FOR CAPILLARY GEL ELECTROPHORESIS

ABSTRACT

5 This invention relates to an electrophoresis separation medium having a gel
matrix of at least one random, linear copolymer comprising a primary comonomer and at
least one secondary comonomer, wherein the comonomers are randomly distributed along
the copolymer chain. The primary comonomer is an acrylamide or an acrylamide
10 derivative that provides the primary physical, chemical, and sieving properties of the gel
matrix. The at least one secondary comonomer imparts an inherent physical, chemical, or
sieving property to the copolymer chain. The primary and secondary comonomers are
present in a ratio sufficient to induce desired properties that optimize electrophoresis
performance. The invention also relates to a method of separating a mixture of biological
15 molecules using this gel matrix, a method of preparing the novel electrophoresis separation
medium, and a capillary tube filled with the electrophoresis separation medium.